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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/656,018

09/05/2003

Christopher J. Stone

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EXAMINER

LANGHNOJA, KUNAL N

ART UNIT

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4115

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/656,018	<b>Applicant(s)</b> STONE, CHRISTOPHER J.	
	<b>Examiner</b> Kunal Langhnoja	<b>Art Unit</b> 4115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/05/2003</u>  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoshen et al (United States Patent Application Publication 2002/0154892), hereinafter, referenced as Hoshen.

**Regarding claim 1**, Hoshen discloses system for distributing video and content on demand. In addition, Hoshen discloses Peer-to-peer connections (i.e., connection between STBs or SSTBs) through typical HFC networks are possible among subscribers that are members of a same cluster. Furthermore, Hoshen discloses issuing a streaming command--Upon receiving a request to view a title, the Management System 57 locates two SSTBs (for example 64 and 65) residing in the same cluster as the requesting subscriber's STB/SSTB 63 and containing the requested title in their storage, which reads on claimed "*accessing requested content on a source content device connected to a network*". Wherein, requested title reads on claimed "requested content", two SSTBs (for example 64 and 65) reads on claimed "source content", and Peer-to-peer connections (i.e., connection between STBs or SSTBs) through typical

HFC networks reads on claimed “device connected to a network”, as disclosed in paragraphs 0062, 0066 and 0067, the method comprising,

receiving a request to view a title, whenever a subscriber selects a title, the STB 10 or SSTB 20 sends a request for a selected title via an upstream interactive channel, to the Management System 57, which reads on claimed “issuing a content access request identifying requested content”. Wherein, STB 10 or SSTB 20 sends a request reads on claimed “issuing a content access request”, and selected title reads on claimed “identifying requested content”, as disclosed in paragraph 0066

management System 57 locates two SSTBs (for example 64 and 65) residing in the same cluster as the requesting subscriber's STB/SSTB 63 and containing the requested title in their storage reads on claimed “determining the location of the source content device including the requested content in the network.” Wherein, management System 57 locates the requested content reads on claimed “determining the location”, two SSTBs reads on claimed “source content device”, requested title reads on claimed “requested content”, and HFC networks reads on claimed “network”, as disclosed in paragraphs 0062 and 0067

content title is streamed from the SSTB 65 reads on claimed “accessing the requested content at the source content device”, as disclosed in paragraph 0067

**Regarding claim 2**, Hoshen discloses everything claimed (see claim 1), in addition, Hoshen discloses receiving a request to view a title, whenever a subscriber selects a title, the STB 10 or SSTB 20 sends a request for a selected title via an upstream interactive channel, to the Management System 57, which reads on claimed

“issuing a content access request identifying requested content comprises issuing a content access request including a program identifier”. Wherein, STB 10 or SSTB 20 sends a request reads on claimed “issuing a content access request”, and selected title reads on claimed “identifying requested content” and “program identifier” as disclosed in paragraph 0066.

**Regarding claim 3**, Hoshen discloses everything claimed (see claim 1), in addition, Hoshen discloses receiving a request to view a title, whenever a subscriber selects a title, the STB 10 or SSTB 20 sends a request for a selected title via an upstream interactive channel, to the Management System 57, which reads on claimed “issuing a content access request identifying requested content comprises issuing a content access request including the title of the requested content”. Wherein, STB 10 or SSTB 20 sends a request reads on claimed “issuing a content access request”, and selected title reads on claimed “identifying requested content” and “title of the requested content” as disclosed in paragraph 0066.

**Regarding claim 4**, Hoshen discloses everything claimed (see claim 1), in addition, Hoshen discloses Peer-to-peer connections (i.e., connection between STBs or SSTBs) through typical HFC networks are possible among subscribers that are members of a same cluster. Furthermore, Hoshen discloses issuing a streaming command--Upon receiving a request to view a title, the Management System 57 locates two SSTBs (for example 64 and 65) residing in the same cluster as the requesting subscriber's STB/SSTB 63 and containing the requested title in their storage, which reads on claimed “determining the location of the source content device including the

requested content in the network comprises engaging an intelligent agent to determine the location of the source content device.” Wherein, management system locates the selected title in the same cluster reads on claimed “determining the location”, two SSTBs containing the requested title reads on claimed “source content device”, requested title is located by the management system in same cluster reads on claimed “including requested content”, HFC network reads on claimed “network”, and management system reads on claimed “intelligent agent”, as disclosed in paragraphs 0062 and 0067

**Regarding claim 5**, Hoshen discloses everything claimed (see claim 1), in addition, Hoshen discloses upon receiving a viewing request, the Management system 57 locates within its database two SSTBs that store the required title (or title slice) and belong to the same cluster as the requesting subscriber's STB/SSTB, which reads on claimed “determining the location of the source content device including the requested content in the network comprises examining the results from the intelligent agent for the information concerning the location of the source content device”. Wherein, management system locates the requested title reads on claimed “determining the location”, two SSTBs that store the required title reads on claimed “source content device including the requested content”, HFC networks reads on claimed “network”, and management system 57 searches through its database to locate the requested title in two SSTBs reads on claimed “examining the results from the intelligent agent for the information concerning the location of the source content device”, as disclosed in paragraphs 0062 and 0165.

**Regarding claim 6**, Hoshen discloses everything claimed (see claim 1), in addition, Hoshen discloses Peer-to-peer connections (i.e., connection between STBs or SSTBs) through typical HFC networks are possible among subscribers that are members of a same cluster. Furthermore, Hoshen discloses issuing a streaming command--Upon receiving a request to view a title, for example from user 63 of FIG. 2, the Management System 57 locates two SSTBs (for example 64 and 65) residing in the same cluster as the requesting subscriber's STB/SSTB 63 and containing the requested title in their storage. One of these SSTBs, SSTB 65 is assigned a streaming role, which reads on claimed "accessing the requested content at the source content device comprises accessing the content at the source content device across the network." Wherein, SSTB 65 is assigned a streaming role reads on claimed "accessing the requested content at the source content device", SSTB 63 receives selected title from the SSTB 65 using HFC network reads on claimed "accessing the content at the source content device across the network", as disclosed in paragraphs 0062 and 0067

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7-9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Shteyn et al (United States Patent Publication 2002/0162109), hereinafter, referenced as Shteyn.

**Regarding claim 7**, Shteyn discloses distributed storage on a P2P network architecture. Furthermore, Shteyn discloses digital video, is received by a local network operator (head-end), preferably via a secure delivery mechanism. Then, the content and/or its parts are distributed to a plurality of STBs, or other network enabled devices with storage capability, within the local network. The content is stored on the STB and registered with a lookup service, hosted by the VOD provider, which reads on claimed “storing content on a content device for access by a network including one or more content devices.” Wherein, content is stored on the STB reads on claimed “storing content on a content device”, registered with a lookup service to retrieve content for future reads on claimed “access by a network”, and distributed to plurality of STBs reads on claimed “on or more content on content device”, as disclosed in paragraph 0006, the method comprising,

digital video, is received by a local network reads on claimed “receiving content for access by the network”, as disclosed in paragraph 0006

the content and/or its a parts are distributed to a plurality of STBs, or other network enabled devices with storage capability reads on claimed “querying one or more content devices to ascertain storage capacity”, as disclosed in paragraph 0006

the content and/or its a parts are distributed to a plurality of STBs, or other network enabled devices with storage capability, within the local network, which reads on claimed “determining the content device with the optimum storage capacity; and uploading the content to the content device with the optimum storage capacity.”

Wherein, among plurality of STBs content is distributed to STBs with storage capability



reads on claimed “determining the content device with the optimum storage capacity; and uploading the content to the content device with the optimum storage capacity”, as disclosed in paragraph 0006

**Regarding claim 8**, Shteyn discloses everything claimed (see claim 7), in addition, Shteyn discloses the content and/or its a parts are distributed to a plurality of STBs, or other network enabled devices with storage capability, within the local network reads on claimed “determining the content device with the optimum storage capacity comprises determining the content device with the largest amount of storage capacity.” Wherein, content is stored on plurality of STBs or other network enable devices based on storage capability reads on claimed “content device with the largest amount of storage capacity”, as disclosed in paragraph 0006

**Regarding claim 9**, Shteyn discloses everything claimed (see claim 7). Shteyn discloses the content and/or its a parts are distributed to a plurality of STBs, or other network enabled devices with storage capability. Furthermore, Shteyn discloses first segment is played out upon downloading. While the first segment is being played out, the second is being downloaded and buffered so that it is available when the play out of the first segment is completed. While playing out a current one of the segments, next one(s) of the segments are being downloaded and buffered, which reads on claimed “uploading the content to the content device with the optimum storage capacity comprises utilizing a trickle method.” Wherein, content and/or its a parts are distributed to a plurality of STBs, or other network enabled devices with storage capability reads on claimed “uploading the content to the content device with the optimum storage

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capacity”, and first segment is being played out, the second is being downloaded and buffered so that it is available when the play out of the first segment is completed. While playing out a current one of the segments, next one(s) of the segments are being downloaded and buffered reads on claimed “trickle method”, as disclosed in paragraph 0006, and 0007

**Regarding claim 12**, Shteyn discloses everything claimed (see claim 7). Shteyn discloses the content and/or its a parts are distributed to a plurality of STBs, or other network enabled devices with storage capability. Furthermore, Shteyn disclose media Service Operators provide consumers with access to audio/video content via broadcast as well as through a high-bandwidth network. They define features and software for consumer set-top boxes (STBs), which include local storage, high processing power, and IP communication capabilities. cable is an asymmetrical IP environment as its upload bandwidth is lower than download bandwidth. The download (server to client) speed is typically 100 KB/sec and the upload (from client to router or server) speed is about 10 KB/sec, which reads on claimed “uploading the content to the content device with the optimum storage capacity comprises utilizing an Internet protocol method.” Wherein, content and/or its a parts are distributed to a plurality of STBs, or other network enabled devices with storage capability reads on claimed “uploading the content to the content device with the optimum storage capacity”, and IP communication capabilities reads on claimed “internet protocol method”, as disclosed in paragraph 0006

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shteyn, in view of Fish et al (United States Patent 7,194,757), hereinafter, referenced as Fish.

**Regarding claim 10**, Shteyn discloses everything claimed (see claim 7). Shteyn discloses the content and/or its parts are distributed to a plurality of STBs, or other network enabled devices with storage capability, which reads on claimed “uploading the content to the content device with the optimum storage capacity”, as disclosed in paragraph 0006. However, Shteyn fails to disclose, “utilizing a high bandwidth push model.” However, the examiner maintains that it was well known in the art to provide the method with “utilizing a high bandwidth push model”, as taught by Fish.

In the similar field of endeavor, Fish discloses method and apparatus for push and pull distribution of multimedia. In addition, Fish discloses system and method can quickly, efficiently, and reliably distribute large, high bandwidth files, particularly audio or video files. Furthermore, The one-way satellite connection 18 provides a high bandwidth vehicle for distribution of media files, particularly larger audio or video files, to affiliates, e.g., 20, and clients, which reads on claimed “utilizing a high bandwidth push model.” Wherein distributing large high bandwidth files to clients reads on claimed “high bandwidth push model”, as disclosed in column 4 lines 9-11 and column 5 lines 50-55.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shteyn by specifically providing method with a step of “utilizing a high bandwidth push model”, as taught by Fish for the purpose of making large media files available to clients soon as possible.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shteyn, in view of Hayasaka et al (United States Patent Publication 2002/0032910), hereinafter, referenced as Hayasaka.

**Regarding claim 11**, Shteyn discloses everything claimed (see claim 7). Shteyn discloses the content and/or its a parts are distributed to a plurality of STBs, or other network enabled devices with storage capability, which reads on claimed “uploading the content to the content device with the optimum storage capacity”, as disclosed in paragraph 0006. However, Shteyn fails to disclose “utilizing a data carousel method.” The examiner maintains that it was well known in the art to provide the method with “utilizing a data carousel method”, as taught by Hayasaka.

In the similar field of endeavor, Hayasaka discloses Composite media file broadcasting program broadcasting control system. In addition, Hayasaka discloses broadcasting method of the composite media file is DSM-CC(Digital Storage Media Command Control) data carousel system defined in ISO (International Standardization Organization)/IEC (International Electrotechnical Commission). In this system, respective files forming the composite media file is repeatedly broadcasted so that the broadcasted composite media file can be obtained by starting viewing the program at

any timing, which reads on claimed “utilizing a data carousel method”, as disclosed in paragraph 0010

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shteyn by specifically providing method with a step of “utilizing a data carousel method”, as taught by Hayasaka for the purpose of completing media files at user’s equipment and playing media files received at users convenience.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kunal Langhnoja whose telephone number is 571-270-3583. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Jefferey Harold can be reached on 571-272-7519. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

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Customer Service Representative or access to the automated information system, call  
800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kunal Langhnoja/  
Examiner, Art Unit 4115

/K. L./  
/Ryan Yang/  
Primary Examiner, Art Unit 2628